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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,407	08/08/2001	Laurent C. Bissonnette	174-934	3426

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EXAMINER

BUTTNER, DAVID J

ART UNIT	PAPER NUMBER
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1712

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DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/923,407

Applicant(s)

BISSONNETTE ET AL.

Examiner

David Buttner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 12-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Claims 1-3 and 5-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the J03106380 Patent.

The reference is believed to exemplify (#5-8) golf ball cores of polybutadiene and Aerosil 200. Aerosil 200 silica with a size of 12 nm (see col. 13, line 43 of Katayama). At least one of the polybutadienes has a Mw/Mn under 3 and a MW > 200,000 (see table 1). There is no reason to believe solution blending results in final product any different from that of the reference's final product (MPEP 2113).

Claims 1-3, 5, 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Sullivan '637 Patent.

Sullivan utilizes silica in golf ball cores. The silica preferably has a size of 2000-6200 nm (col. 4, line 38). The core typically uses BR-1220 as the rubber (see examples). This rubber inherently has the required MW and polydispersity (see table 2 of Nesbitt '302). There is no reason to believe solution blended cores are different from Sullivan's cores.

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Walker '272 Patent.

Walker forms golf balls from butadiene and Hi Sil 233 is a silica with a size of 20 nm see (Absil col. 10, lines 46-49). There is no reason to believe solution blended balls are different from Walker's ball.

Claims 1-3 and 5-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Schweiker "238 Patent.

Schweiker exemplifies polybutadiene compositions containing Hi Sil 215. Hi Sil 215 is silica with a size of 2 nm (see Kuan col. 16, line 50). The composition can be used in the core or cover (col. 3, line 18). The composition is indistinguishable from applicant's solution blended composition.

Claims 1-3, 5, 8 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Ihara Patent.

Ihara exemplifies golf ball thread (col. 5, line 31) of polybutadiene, natural rubber and ZnO.

Claims 1-3, 5, 8 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Dalton EP 613700 Patent.

Dalton forms golf balls covers of balata and polybutadiene (examples 26-28).

Claims 1-3, 5, 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Hamada '285 Patent.

Hamada exemplifies (table 2) cores for golf balls by solution blending BR150L with a high viscosity polybutadiene. BR150L inherently is a polybutadiene of Mw 493,000 and Mw/Mn of 2.53 (see Noguchi's description col. 14, line 65).

Claims 1-3, 8 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Crouch '160 Patent.

Crouch blends transpolyisoprene with transpolybutadiene for use in golf ball covers (col. 2, line 14). The two rubbers can be solution blended (col. 2, lines 59).

Claims 1, 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Kohn '156 Patent.

Kohn exemplifies (II) solution blending polybutadiene and microballon filler. The microballoons should have a size of 1-100 microns (col. 4, line 34).

Claims 1-3 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the GB 1026254 Patent in view of Sandstrom '761.

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GB '254 exemplifies (IX) golf ball cores of cispolybutadiene and a preblend of transpolyisoprene with transpolybutadiene. The preblend is mixed on a mill rather than solution blended.

It is known that transpolybutadiene is difficult to mix in conventional rubber mixers (col. 2, lines 26-32 of Sandstrom). Solvent blending is an alternative to mixing in a dry state (col. 6 line 19-24 of Sandstrom).

It would have been obvious to solution blend the GB '254 transpolyisoprene/transpolybutadiene preblend to avoid the problems discussed by Sandstrom. This appears to be crux of applicant's invention (page 10 line 10-15 of spec).

Claims 1-3, 5 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Bissonette '357 Patent in view of Sandstrom '761.

Bissonette discloses three layer golf balls wherein the mantle (i.e., outer core or inner cover) contains cispolybutadiene and a reinforcing polymer. The reinforcing polymer can be transpolybutadiene (col. 7 line 32). Bissonette does not suggest solvent blending the two polybutadienes.

Sandstrom recognizes the problems in mixing transpolybutadiene (col. 2, lines 25-32, 60-64). Solvent blending (col. 6, line 20) avoids the problems. It would have been obvious to solvent blend Bissonettes cispolybutadiene with transpolybutadiene.

Claims 1-3 and 5-7 re rejected under 35 U.S.C. 103(a) as being unpatentable over the Walker '272 Patent in view of Sandstrom '761.

Walker forms golf balls from cispolybutadiene, Diene 35 NF and Hi Sil 233, Diene 35 NF inherently has about 50% transpolybutadiene. Hi Sil 233 inherently is silica of 20 nm (see Absil col. 10, lines 46-49). Walker does not suggest solvent blending the composition.

It is known that there is difficulty in mixing transpolybutadiene with other elastomers and rubber compounding ingredients (col. 2, lines 25-32 of Sandstrom). Sandstrom teaches solvent blending avoids the problems.

Applicant's arguments filed 3/12/03 have been fully considered but they are not persuasive.

Applicant argues that none of the previously cite rejections suggest solvent blending.

Applicant's limitation is product by process in nature. Such limitations are not limited to the recited steps-only the resulting structure is required (MPEP 2113). There is no reason to believe the final product of the cited art (through roll mill, banbury etc) is any different from the final product made through solvent blending.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 703-308-2403. The examiner can normally be reached on Weekdays from 10:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

DAVID J. BUTTNER  
PRIMARY EXAMINER

D. Buttner/mn  
April 15, 2003

*David Buttner*